

IN THE CLAIMS:

Please amend the claims as shown below.

1. (Currently amended) A method comprising:
monitoring ~~utilization of a~~ one or more system ~~resource~~ resources to obtain values
of a plurality of metrics, including a first metric and a second metric; and
a data management process ~~selectively~~ performing one or more I/O operations
dependent upon the ~~monitored utilization of the system resource~~ plurality
of metrics, wherein said performing includes determining a scheduling of
at least one I/O operation of the one or more I/O operations using a
specified weight assigned to the first metric relative to the second metric.
2. (Original) The method of claim 1 wherein said data management process is
executed as a portion of a data backup application.
3. (Currently amended) The method of claim 1 wherein the plurality of metrics
includes a utilization of a system resource of the one or more system resources, wherein
~~selectively performing the~~ one or more I/O operations includes:
allowing said one or more I/O operations to be performed in response to the
~~monitored~~ utilization of the system resource falling below a ~~predetermined~~
threshold indicated by a user-specified parameter; and
preventing said one or more I/O operations from being performed in response to
the ~~monitored~~ utilization of the system resource exceeding the
predetermined threshold.
4. (Currently amended) The method of claim 3 wherein said one or more I/O
operations are performed in response to the ~~monitored~~ utilization of the system resource
falling below a predetermined threshold for at least a predetermined amount of time.

5. (Currently amended) The method of claim 3 wherein selectively performing the one or more I/O operations further includes allowing said one or more I/O operations to be performed in response to said one or more I/O operations not having been performed for longer than a predetermined timeout period.
6. (Currently amended) The method of claim 1 wherein ~~said~~ the one or more system resource ~~is~~ resources include an input/output (I/O) subsystem.
7. (Currently amended) The method of claim 1 further comprising selectively time slicing said one or more I/O operations dependent upon ~~the monitored utilization of the system resource~~ at least one metric of the plurality of metrics.
- 8 – 10. Cancelled.
11. (Currently amended) A system comprising at least one processor and a memory coupled to the processor, wherein the memory includes program instructions executable to implement a method comprising:
- monitoring utilization of a one or more system resource resources to obtain values of a plurality of metrics, including a first metric and a second metric; and
 - a data management process selectively performing one or more I/O operations dependent upon the monitored utilization of the system resource plurality of metrics, wherein said performing includes determining a scheduling of at least one I/O operation of the one or more I/O operations using a specified weight assigned to the first metric relative to the second metric.
12. (Original) The system of claim 11 wherein said data management process is executed as a portion of a data backup application.
13. (Currently amended) The system of claim 11 wherein the plurality of metrics include a utilization of a system resource of the one or more system resources, wherein selectively performing the one or more I/O operations includes:

allowing said one or more I/O operations to be performed in response to the ~~monitored~~ utilization of the system resource falling below a ~~predetermined~~ threshold indicated by a user-specified parameter; and preventing said one or more I/O operations from being performed in response to the ~~monitored~~ utilization of the system resource exceeding the ~~predetermined~~ threshold.

14. (Currently amended) The system of claim 13 wherein said one or more I/O operations are performed in response to the ~~monitored~~ utilization of the system resource falling below a predetermined threshold for at least a predetermined amount of time.

15. (Currently amended) The system of claim 13 wherein ~~selectively~~ performing the one or more I/O operations further includes allowing said one or more I/O operations to be performed in response to said one or more I/O operations not having been performed for longer than a predetermined timeout period.

16. (Currently amended) The system of claim 11 wherein ~~said system resource is the~~ one or more system resources include an input/output (I/O) subsystem.

17. (Currently amended) The system of claim 11 wherein ~~said system resource is the~~ one or more system resources include one or more central processing units (CPUs).

18. (Currently amended) The system of claim 11 ~~further comprising wherein the method further comprises~~ selectively time slicing said one or more I/O operations dependent upon ~~the monitored utilization of the system resource~~ at least one metric of the one or more metrics.

19 – 21. Cancelled.

22. (Currently amended) A tangible, computer readable medium including program instructions computer-executable to implement a method comprising:

monitoring ~~utilization of a one or more system resource~~ resources to obtain values
of a plurality of metrics, including a first metric and a second metric; and
a data management process ~~selectively performing one or more~~ I/O operations
dependent upon the ~~monitored utilization of the system resource~~ plurality
of metrics, wherein said performing includes determining a scheduling of
at least one I/O operation of the one or more I/O operations using a
specified weight assigned to the first metric relative to the second metric.

23. (Original) The computer readable medium of claim 22 wherein said data management process is executed as a portion of a data backup application.

24. (Currently amended) The computer readable medium of claim 22 wherein the plurality of metrics includes a utilization of a system resource of the one or more system resources, wherein selectively performing the one or more I/O operations includes:

allowing said one or more I/O operations to be performed in response to the
~~monitored~~ utilization of the system resource falling below a ~~predetermined~~
threshold indicated by a user-specified parameter; and
preventing said one or more I/O operations from being performed in response to
the ~~monitored~~ utilization of the system resource exceeding the
~~predetermined~~ threshold.

25 – 27. Cancelled.

28. (New) The method of claim 1, wherein the one or more system resources include a first system resource and a second system resource, wherein the first metric includes a utilization of the first system resource and the second metric includes a utilization of the second system resource.

29. (New) The method of claim 1, wherein the first metric is indicative of a level of a first type of activity at a particular system resource of the one or more system resources and

the second metric is indicative of a level of a second type of activity at the particular system resource.

30. (New) The method of claim 29, wherein the particular system resource comprises a storage device, wherein the first type of activity comprises write operations, and wherein the second type of activity type comprises read operations.

31. (New) The method of claim 1, further comprising:
obtaining user-specified values of one or more parameters to schedule the one or more I/O operations, including a particular parameter specifying the relative weight assigned to the particular metric.

32. (New) The method of claim 31, wherein the one or more parameters include an identification of the one or more system resources.

33. (New) The method of claim 31, further comprising:
automatically tuning at least one parameter of the one or more parameters based at least in part on historical information associated with one or more metrics of the plurality of metrics.

34. (New) The method of claim 31, wherein the one or more parameters include a parameter specifying an amount of data to be transferred by the data management process in each period of I/O activity of a sequence of periods of I/O activity.

35. (New) The method of claim 31, wherein the one or more parameters include a parameter specifying a length of a delay between at least two successive periods of a sequence of periods of I/O activity of the data management process.

36. (New) The method of claim 35, wherein a plurality of periods of I/O activity of the sequence correspond to a single backup operation, further comprising dynamically

modifying the length of the delay while the single backup operation is in progress in response to a change in a value of a metric of the plurality of metrics.